IEEE President-Elect Candidates Address Computer Society Concerns

The IEEE Computer Society has established a reputation for excellence within the fields of computing. As a component of IEEE, the Computer Society’s activities parallel those of 45 other IEEE societies and councils serving the computing and engineering disciplines. Representing by far the largest IEEE society contingent, the Computer Society serves computing and IT professionals within IEEE and the network of more than 400,000 members worldwide.

Recognizing the impact of IEEE leadership over the Computer Society and in turn the power of Computer Society members’ votes to influence the selection of IEEE leadership, we posed questions to this year’s IEEE president-elect candidates. Because this election determines who will serve as president-elect in 2013, president in 2014, and past president in 2015—vital positions within IEEE’s governing body—our members must cast informed votes.

Our volunteer leaders have identified the following questions as essential to the Computer Society, IEEE, and the Computer Society’s relationship with IEEE. The first response to each question states the Computer Society’s position. These positions synthesize the views of our most senior leadership: the Society’s current, past, and incoming presidents.

We present these questions and answers (limited to 150 words each) to help you make your decision in the IEEE annual election. Only ballots received by noon, central time, on 1 October 2012 will be counted.

We also remind and encourage you to cast your vote for Computer Society leaders by noon EDT on 8 October 2012 in our Society election.

—David Alan Grier
IEEE Computer Society President-Elect

José Roberto B. de Marca
José Roberto B. de Marca received a PhD-EE from USC, Los Angeles, where he was a Fulbright Scholar. An IEEE Fellow and full member of the Brazilian National Academies of Sciences and of Engineering, he was 2008 IEEE Vice President, Technical Activities, and the 2000-2001 President, IEEE Communications Society. De Marca was Scientific Director of the Brazilian National Research Council, managing a $300 million funding program, and was a member of the presidential advisory board of Finep, Brazil’s largest funding agency for R&D&I. Among his several international assignments, he twice served as scientific consultant with AT&T Bell Laboratories; was a visiting professor with HKUST, Hong Kong; and was a guest scientist with NEC Laboratories Europe.

Tariq Durrani
Tariq Durrani (www.tariqdurrani.org) is research professor, University of Strathclyde, Glasgow, Scotland. He was Deputy Principal—the second highest university position (2000-2006); chair of one of the largest EEE departments in Europe (1990-1994). He has authored 350 publications and supervised over 40 PhD theses.


He has held eight board directorships, including Scottish Funding Council, UK Leadership Foundation for Higher Education, UNESCO National Commission UK. He is Fellow: IEEE, UK Royal Academy of Engineering, Royal Society of Edinburgh, and IET.

In 2003, Queen Elizabeth awarded him an OBE for “services to electronics research and higher education.”
**QUESTION 1: Benefit to the Computer Society**

**De Marca**

The Computer Society is unique in IEEE because it is not only the largest society in IEEE, it is also a society with a strong competitor, ACM. If IEEE is to be a leading organization in the future, it must also be a leader in computer technology. Hence the Computer Society (CS) must be the organization of choice for professionals in this area. By professionals, I mean people who make their living in these areas (or are about to) and not necessarily engineers or degree holders in any predefined field. The IEEE leadership, starting from the president, must guarantee the resources for CS to be an effective competitor. I shall work in partnership with the CS leadership to tackle the unique challenges faced by the Society and help it continue to attract thought and industry leaders and offer best-in-class products and services to the global professional community.

**Durrani**

As the largest technical society within IEEE, in terms of membership, products, and services, I see the Computer Society playing an active role in the leadership and directions within IEEE. As an IEEE Director, having supported the provision of resources to the Computer Society’s efforts in revitalizing itself, I see this continuing. In this context, the recent CS strategy should position the Society toward growth of membership and the creation of a sustainable financial model. Similarly, the need to identify the requirements and benefits for Computer Society Affiliates would be essential to providing effective support.

Having been president of the IEEE Engineering Management Society, and having played a role in the formation of the Triple Helix Association (THA) that promotes interactions between business, government, and academia for sustained economic growth, I am well conversant with the needs of nonengineers. THA includes nonengineers, businessmen, entrepreneurs, managers, and many other professionals.

**COMPUTER SOCIETY POSITION**

Whatever the policies might be, they should provide a better environment for the members of the Computer Society to advance their field, to be better teachers and practitioners, and to be better professionals. In particular, the policies must allow us to have control over the knowledge that we develop and to reach the communities that utilize our knowledge, whether those communities are part of IEEE or not.

**Benefit to the Computer Society**

How would your presidency benefit the Computer Society? Specifically, how would it benefit a large society in which a significant number of the members are not engineers but instead have nonengineering roles in business, government, or education?
**QUESTION 2: Value of IEEE membership**

What is the value of an IEEE membership to the person who is considering joining the Computer Society? What is the value to someone who might otherwise join a group such as the Computer Society of India, the Australian Computer Society, or the ACM? How will your presidency support and increase that value?

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**COMPUTER SOCIETY POSITION**

IEEE membership offers participation in a global engineering community, and it provides members the benefits of access to new knowledge, best practices, and contact with skilled practitioners and scholars. IEEE is a diverse organization and includes practitioners such as software engineers, security engineers, and computer scientists, who have skills beyond the traditional electrical engineering community.

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**De Marca**

In comparison with regional societies, the Computer Society offers superior opportunities for networking with leading professionals from different parts of the world. This networking can generate joint research projects, partnerships among enterprises, and career growth and moves. When compared with other transnational organizations, CS offers a breadth of quality products that is hard to match. CS has also been working to drive its costs down; however, central costs are creating a burden to large societies, making it difficult to invest in new products. As president, I will push for new business models that facilitate the financial viability of societies. Among IEEE membership advantages is the opportunity to interact with professionals working in related areas who are active in other Societies. Multidisciplinary projects currently being fostered in the area I chair, Future Directions, exemplify these opportunities for technical cross-fertilization that can be beneficial to careers in the current technology evolution scenario.

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**Durrani**

Individuals join IEEE societies that meet their needs and expectations. All recent surveys of IEEE members have indicated the most valuable services offered by societies are access to technical literature and know-how for career development. I recognize the importance of CS maintaining its competitive advantage by continually enhancing its portfolio of leading-edge technical publications, tracking emerging technologies, and offering training for employability, certification, and skills development. Further training support is available through the IEEE eLearning library that I helped develop, as VP IEEE Educational Activities Board.

CS seeks to partner with national sister societies, worldwide. Such globalization activity is to be commended. This will provide added value by delivering CS benefits that will substantially increase an individual’s portfolio of local benefits. I would also encourage strengthening ongoing relationships with international computing societies in support of this work. Synergistic alliances with organizations such as CSI, CCF, and BCS (Brazil) are invaluable.
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<th>De Marca</th>
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<td>“One IEEE” is not a bad concept. However, consolidation of services, supposedly one key “One IEEE” advantage, must result in reduction of overall infrastructure costs, which has not yet happened. It is important that IEEE units work together to offer better services and to address new technologies that are multidisciplinary. IEEE needs to offer a coherent and comprehensive view—one-stop shop—of its activities in a given topic to members and customers. On the other hand, “One IEEE” will only be successful if roles and responsibilities are clearly established, instilling trust that allows teamwork among volunteers and staff, and resulting in benefits to all stakeholders. In this model, the Technical Activities (TA) area should be the chief technical organization within IEEE, with a mission that includes content quality management. As a corollary, CS, a TA unit, should have similar responsibility over technical products in its fields of interest.</td>
<td>I firmly believe in an integrated IEEE reflecting the values of “One IEEE,” beyond the slogan. Partnering with other IEEE societies brings compelling value. Initiatives such as cloud computing clearly illustrate benefits of mutuality between societies, under CS leadership. This ensures IEEE’s lead in cross-disciplinary subjects. Increasingly, emerging areas of technology require interdisciplinary effort, thus the need for “One IEEE” becomes even more paramount, where IEEE societies and other entities work together for the greater benefit of IEEE members. Opportunities exist for cross-disciplinary teams to lead in areas such as cybersecurity, life sciences, and green technologies. The fields of interest (FOIs) of IEEE societies are prized attributes, established through mutual consent, open discussion, and collegial discourse. Once agreed, the FOIs become the property of a society, against which it develops strategies, related products, and services. I think it is important that the Computer Society retains control over its FOIs.</td>
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<th>QUESTION 3: Value of “One IEEE”</th>
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<td>3 Currently IEEE is following a strategy of building a unified organization, the “One IEEE” plan. Do you support such a policy? If so, what is the value of that policy to the Computer Society and its members? In such a plan, would the Computer Society still retain control over the subjects that fall into its fields of interest?</td>
<td>3 From the “One IEEE” concept, the Computer Society receives the advantages of unified services to its organization and members. The concept also allows Computer Society members to build their community within the rich framework of IEEE. Computer Society members should and ought to be able to attend to their own fields of interest and work with other groups both within and outside IEEE.</td>
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| 3 From the “One IEEE” concept, the Computer Society receives the advantages of unified services to its organization and members. The concept also allows Computer Society members to build their community within the rich framework of IEEE. Computer Society members should and ought to be able to attend to their own fields of interest and work with other groups both within and outside IEEE. |

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<th><strong>QUESTION 4: Membership governance</strong></th>
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<td><strong>4</strong> Will IEEE remain a membership-governed organization or will it be directed by the professional core in Piscataway? What is your strategy on this issue, and how will it benefit the members of the Computer Society?</td>
<td><strong>4</strong> IEEE should remain a membership-governed organization. The IEEE Board of Directors should provide overall strategic vision and direction. IEEE’s professional core managers should implement strategy and manage daily IEEE operations. The Computer Society’s direction and strategies should be directed by its members, in concordance with the other IEEE volunteer leaders. The Society recognizes that the professional core in Piscataway, Los Alamitos, Washington, D.C., and other IEEE sites make important contributions to the management of the Society and help it to provide services to its members.</td>
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**De Marca**

IEEE must remain a membership-governed organization! However, I also support the continuation of an effective and congenial partnership with professional staff. Their experience, competency, and continuity are essential for IEEE’s success. Using Internet jargon, the IEEE should remain more like a .org than a .com. More than 100,000 volunteers help IEEE achieve its objectives. A former IEEE CFO valued the volunteers’ contributions to IEEE at more than US$3 billion per year. I believe he was right. This enormous contribution is possible only if the volunteers perceive that the organization’s objectives are aligned with the reasons they decided to dedicate their very precious time to IEEE. It is the volunteer ethics as well as talent and dedication that have led to IEEE’s indisputable international recognition and respect. Changes in these fundamental characteristics would eventually degrade IEEE’s quality and prestige. That must not be allowed to happen.

**Durrani**

IEEE has been and is a member-driven organization, and shall remain as such under my leadership. For an organization to remain effective, grow, and succeed, there needs to be a cordial and mutually supportive relationship between the staff and the volunteer members. Fortunately, such a mutually reinforcing relationship currently exists, which represents the cornerstone of success of IEEE.

The IEEE Board of Directors provides vision and future strategic directions. The role of staff is operational, aimed at implementing strategy and delivering the day-to-day functions and activities of this large global organization. Members of the Computer Society benefit both from CS’s own staff and from the services delivered by professionals at IEEE headquarters.

Having held senior management positions at my university and as board member of other leading professional organizations, I have the breadth of experience, management skills, and drive to lead IEEE to future success.
This has been a long-standing issue. There is a need for a permanent solution that demonstrates the interest in these professionals by the parent organization. Over 20% of the CS membership belongs to the Affiliate class, while 80% of all Society Affiliates are in CS. These numbers indicate affiliate members are very important to CS operations and not so critical to the other 37 Societies. The current IEEE financial model and charges for Affiliates are the root cause for this dilemma. Maybe it is time for bold solutions that could end this agonizing discussion.

I suggest, for example, that a new membership category be considered for CS, and just for CS, that would have a different (competitive) financial model within IEEE. This new lower-tier category, which would replace Affiliates within CS but most likely have comparable benefits, would serve as an entry point for professionals to experience IEEE services.

De Marca

One-quarter of the Computer Society’s members are Affiliates. Because of IEEE policies, the dues do not fully cover the costs of this class of members, and the Computer Society must subsidize these members with revenue from other sources. Do you support these policies? If so, how do such policies benefit the Computer Society and its members?

Durrani

The Affiliate members issue has been vexing for the Computer Society. Recognizing this, the IEEE Board of Directors has offered subsidies to support Affiliates. The recent CS initiatives on corporate membership, and those aimed at differentiated dues for Affiliates from different parts of the world, are useful moves in the right direction. Affiliates would still be expected to pay a contribution to cover the membership processing costs, although perhaps it is timely to reexamine costs in that area. Related to this could be a drive to convert more CS Affiliates into full IEEE members.

The Computer Society faces competition from other professional associations that can offer membership and other products at lower fees. IEEE can assist the Society’s efforts by supporting membership development endeavors, minimizing costs, and eliminating internal barriers to serving its members and customers.